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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/754,045	01/08/2004	Raman Patel	TEK-B	6070

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Daniel J. Hudak, Jr.
Hudak, Shunk & Farine Co., L.P.A.
2020 Front Street
Cuyahoga Falls, OH 44221

EXAMINER

NUTTER, NATHAN M

ART UNIT	PAPER NUMBER
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1711

DATE MAILED: 01/09/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/754,045

Applicant(s)

PATEL ET AL.

Examiner

Nathan M. Nutter

Art Unit

1711

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 October 2005.
2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3-11 and 13-31 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) 1,3-11 and 13-31 is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Response to Amendment

The rejection of claims 1-29 under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-29 of copending Application No. 11/030,243, Patel et al, is hereby expressly withdrawn in view of the timely filed Terminal Disclaimer of 28 October 2005.

The rejection of claims 1-29 under 35 U.S.C. 103(a) as being unpatentable over Shimizu et al (US 5,310,800) is hereby expressly withdrawn.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 3-11 and 13-31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Coran et al (US 4,104,210) or Coran et al (US 4,141,878).

The reference to Coran et al (US 4,104,210) teaches the production of a thermoplastic vulcanizate (TPV), essentially identical to that produced herein as regards composition and constitutional parameters that may be employed with other polyolefin resins, as herein claimed. Note the paragraph bridging column 1 to column 2 and the paragraph bridging column 2 to column 3 for the broad concept and the production of the TPV. Further, note column 3 (lines 27-53) for the specific particle sizes of the dispersed phase, and the compositional limitations including the recitations in claims 4,

Art Unit: 1711

6-8, 14, 16-18, 23, 25-27 and 29. Further, note column 5 (lines 14-46) for the rubber constituent. At column 6 (lines 51 et seq) the reference shows the employment of extender oils. The reference teaches the addition of conventional additives at column 6 (lines 33 et seq) which would embrace flame retardants. The reference teaches broadly the employment of the resin blend composition with other thermoplastic polyolefin resins at column 7 (lines 11-21). Surely, this broad recitation would embrace homopolymers, as well as copolymers. Subsequent employment of the resin blend composition in rotational molding operations would have surely been an obvious modification to an artisan.

The reference to Coran et al (US 4,141,878) teaches the production of a thermoplastic vulcanizate (TPV), essentially identical to that produced herein as regards composition and constitutional parameters, that may be employed with other polyolefin resins, as herein claimed. Note column 1 (line 50) to column 2 (line 44), and the paragraph bridging column 2 to column 3 for the broad concept, and the production of the TPV. Further, note column 2 (lines 38-44) for the specific particle sizes of the dispersed phase, and the compositional limitations including the recitations in claims 4, 6-8, 14, 16-18, 23, 25-27 and 29. Further, note column 5 (lines 14-46) for the rubber constituent. At column 4 (lines 19-43) the reference shows the employment of extender oils. The reference teaches the addition of conventional additives at the paragraph bridging column 5 to column 6, which would embrace flame retardants. The reference teaches broadly the employment of the resin blend composition with other thermoplastic polyolefin resins at column 6 (lines 28-40). This broad recitation would embrace

Art Unit: 1711

homopolymers, as well as copolymers. Subsequent employment of the resin blend composition in rotational molding operations would have surely been an obvious modification to an artisan.

Claims 1-3, 5-7, 11-13, 15-17, 21 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Coran et al (US 4,130,535).

The reference to Coran et al (US 4,130,535) teaches the production of a thermoplastic vulcanizate (TPV), essentially identical to that produced herein as regards composition and constitutional parameters, that may be employed with other polyolefin resins, as herein claimed. Note column 2 (lines 1-19) and column 2 (line 53) to column 3 (line 26) for the broad concept, and the production of the TPV. Further, note column 5 (lines 7-47) for the rubber and polyolefin constituents. At the paragraph bridging column 5 to column 6, the reference shows the employment of extender oils. The reference teaches broadly the employment of the resin blend composition with other thermoplastic polyolefin resins at column 7 (lines 41-54). Surely, this broad recitation would embrace homopolymers, as well as copolymers. Subsequent employment of the resin blend composition in rotational molding operations would have surely been an obvious modification to an artisan.

Response to Arguments

With regard to the rejection of the claims over Coran et al (US 4,104,210), applicants assert that the "rubber component is present in an amount from about 2 to about 60 parts per 100 parts by weight of the ***matrix polymer*** and the ***thermoplastic***

Art Unit: 1711

polyolefin component. Thus, the toughened thermoplastic composition contains less than about 37.5 parts of the ***rubber component*** per 100 parts by weight of the ***rubber component of the thermoplastic elastomer component, matrix polymer of the thermoplastic elastomer component, and thermoplastic polyolefin component.***

Applicants go on to point out that Coran et al (US 4,104,210) teach “at least 55 parts by weight of rubber per 100 parts by weight of polyolefin resin and rubber” at column 1 (lines 45-46). The measure disclosed in the reference is of a different basis than that calculated by applicants. The reference teaches the addition of other thermoplastic olefin resins at column 7 (lines 11-21). That passage states that the “properties of the modified resin depend upon the amount of thermoplastic elastomeric composition.” This is clear indication as to why one of ordinary skill would know to manipulate the amount of the rubber constituent. The reference goes on to teach that “the modified resin contains about 5 to 50 parts by weight of rubber per about 95 to 50 parts total weight of resin.” This is clearly within the bounds as recited and claimed herein. Applicants calculate an inclusion of 37.5 parts of rubber per 100 parts by weight of rubber (as the upper limit), matrix polymer and thermoplastic polymer. The patent clearly teaches a range that is within the range as contemplated herein. The passage recited by counsel at column 1 (lines 60-63) is relevant only so far as the rates of inclusion are recited for the rubber and resin alone and not as it is construed as being for the rubber, resin matrix and polyolefin. Furthermore, the product of the instant claims might be construed by applicants’ argument to have “reduced toughness” compared to that of the reference. Regardless, the comparison is not accurate.

Art Unit: 1711

With regard to the rejection of the claims over Coran et al (US 4,141,878), applicants again assert that the "rubber component is present in an amount from about 2 to about 60 parts per 100 parts by weight of the **matrix polymer** and the **thermoplastic polyolefin** component. Thus, the toughened thermoplastic composition contains less than about 37.5 parts of the **rubber component** per 100 parts by weight of the **rubber component** of the thermoplastic elastomer component, **matrix polymer** of the thermoplastic elastomer component, and **thermoplastic polyolefin component**."

Applicants go

Counsel goes on to point out that Coran et al (US 4,141,878) teach "(w)hen the quantity of cross-linked CSM rubber, in the absence of plasticizer falls below about 50 parts by weight per 100 parts by weight of polyolefin resin and CSM rubber" at column 2 (lines 32-38). The measure is of a different basis than that calculated by applicants. Further, the patent teaches the inclusion of plasticizers at column 4 (lines 36-40), and the instant claims do not exclude the use of plasticizers. The reference teaches the addition of other thermoplastic olefin resins at column 6 (lines 28-40). Applicants have ignored the fact that the reference teaches at column 1 (lines 55-60) that the amount of "about 85 to 35 parts by weight of cross-linked CSM rubber per 100 parts by weight of polyolefin resin and CSM rubber," clearly overlaps with that recited and claimed herein.

Applicants allege that the rejection of claims 1-3, 5-7, 11-13, 15-17, 21 and 22 under 35 U.S.C. 103(a) as being unpatentable over Coran et al (US 4,130,535) is made in hindsight. In response to applicant's argument that the examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that

Art Unit: 1711

any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971). With regard to the amount of extender oil employed, the reference teaches at column 6 (lines 19 et seq) that the "quantity of extender oil added depends upon the properties desired," and "the amount of extender oil depends, at least in part, upon the type of rubber." A skilled artisan would know to manipulate the amount of extender oil by these teachings. It is pointed out to applicants that this rejection was made under 35 USC 103 and not under 35 USC 102. Applicants attempt to use the standards of 35 USC 102 to nullify the reasoning set out by the Examiner.

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

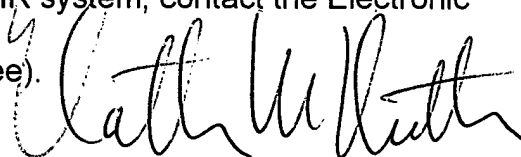
A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Art Unit: 1711

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nathan M. Nutter whose telephone number is 571-272-1076. The examiner can normally be reached on 9:30 a.m.-6:00 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James J. Seidleck can be reached on 571-272-1078. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Nathan M. Nutter
Primary Examiner
Art Unit 1711

nmn

5 January 2005